

BRUHATH BANGALORE MAHANAGARA PALIKE
DASARAHALLI ZONE SHETTYHALLI SUB DIVISION WARD NO 12

Modified Estimate for the work:

Improvements to roads and Drains in KG Halli Gurunath Lay Out and Surrounding area in Ward No 12 Shettyhalli Sub Division.

Estimate Cost Rs : **9242680.76**

No	Description of Work	No	Length	B1	B2	Avg B	Depth	Quantity	Unit	Rate	Amount
1	Removing & Refixing stone slabs of drains and pointing in C.M (1:3) complete as per the specification & as per direction of Engineer-in-charge of the work (KPWD SR 2018-19, Page No. 27 Item 5.33)										
	16th Main road from KG Halli road LHS	2	30.00			0.90		54.00			
	"_"	1	27.00			1.80		48.60			
	"_"	2	30.00			0.90		54.00			
	16th Main road from KG Halli road RHS	1	29.50			0.90		26.55			
	"_"	2	30.00			0.90		54.00			
	"_"	1	26.40			1.80		47.52			
	15th Main road from KG Halli road LHS	1	26.70			0.90		24.03			
	"_"	2	30.00			0.90		54.00			
	"_"	1	20.50			0.90		18.45			
	"_"	1	25.60			0.90		23.04			
	15th Main road from KG Halli road RHS	2	30.00			0.90		54.00			
	"_"	1	28.50			0.90		25.65			
	"_"	1	26.00			0.90		23.40			
	"_"	1	16.50			0.90		14.85			
	14th Main road from KG Halli road LHS	2	30.00			0.90		54.00			
	"_"	1	28.90			0.90		26.01			
	"_"	1	26.80			0.90		24.12			
	"_"	1	24.50			0.90		22.05			
	14th Main road from KG Halli road RHS	1	28.60			0.90		25.74			
	"_"	1	24.90			0.90		22.41			
	"_"	1	19.90			0.90		17.91			
	"_"	2	30.00			0.90		54.00			
	13th Main road from KG Halli road LHS	2	30.00			0.90		54.00			
	"_"	1	26.80			0.90		24.12			
	"_"	1	28.50			0.90		25.65			
	"_"	1	29.40			0.90		26.46			
	13th Main road from KG Halli road RHS	1	28.60			1.80		51.48			
	"_"	1	24.90			0.90		22.41			
	"_"	1	19.90			0.90		17.91			
	"_"	2	30.00			0.90		54.00			
	12th Main road from KG Halli road RHS	2	30.00			0.90		54.00			
	1st Cross Road	2	27.20			1.80		97.92			
	1st Cross Road	2	27.00			1.80		97.20			
	1st Cross Road	2	26.50			1.80		95.40			
	3rd Cross Road LHS Ch: 0.00 to 150	3	30.00			0.75		67.50			
	"_" Ch: 150.0 to 175.0	1	25.00			0.75		18.75			
	SLV Provision store Cross Road LHS Ch:0.00to 150.0	5	30.00			0.90		135.00			
		1	16.20			0.90		14.58			
	SLV Provision store Cross Road RHS Ch:0.00to 150.0	5	30.00			0.90		135.00			
	Adya Provision Stpre Cross road LHS Ch: 0.00 to 150	5	30.00			1.80		270.00			
	Adya Provision Stpre Cross road RHS Ch: 0.00 to 150	5	30.00			1.80		270.00			
	Rate: As per Schedule B (Rs 111.30)							2299.71	Sqm		
								2299.71	Sqm	111.30	255958.00

Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per the specification & as per direction of Engineer-in-charge of the work (page No143, Item No 19.1/ PWD SR 2018-19)									
Road									
16th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	7.90	6.20	7.05	0.30	63.45		
Ch: 30.00 to 60.00	1	30.00	6.20	4.80	5.50	0.30	49.50		
Ch: 60.00 to 62.10	1	2.10	4.80	4.80	4.80	0.30	3.02		
Ch:62.10 to 92.10	1	30.00	4.80	5.00	4.90	0.30	44.10		
Ch:92.10 to 122.10	1	30.00	5.00	6.40	5.70	0.30	51.30		
Ch:122.10 to 152.10	1	30.00	6.40	6.20	6.30	0.30	56.70		
Ch:152.10 to 156.10	1	4.00	6.20	6.75	6.48	0.30	7.77		
15th Main road from KG Halli road LHS Ch: 0.00 to 60.00	2	30.00	0.85	1.00	0.93	0.25	13.88		
Ch: 60.00 to 120.00	2	30.00	1.00	0.90	0.95	0.25	14.25		
Ch: 120.00 to 132.00	2	12.00	0.90	1.10	1.00	0.25	6.00		
15th Main road from KG Halli road RHS ch: 0 to 60.00	2	30.00	1.10	0.80	0.95	0.25	14.25		
Ch: 60.00 to 120.00	2	30.00	0.80	1.25	1.03	0.25	15.38		
Ch: 120.00 to 127.00	1	7.00	0.85	1.00	0.93	0.25	1.62		
14th Main road from KG Halli road LHS ch: 0 to 60.00	2	30.00	0.90	1.10	1.00	0.25	15.00		
Ch: 60.00 to 120.00	2	30.00	2.50	2.15	2.33	0.25	34.88		
Ch: 120.00 to 141.00	1	21.00	0.75	1.05	0.90	0.25	4.73		
14th Main road from KG Halli road RHS ch: 0 to 60.00	2	30.00	0.95	1.25	1.10	0.25	16.50		
Ch: 60.00 to 120.00	2	30.00	1.25	0.75	1.00	0.25	15.00		
Ch: 120.00 to 180.00	2	30.00	0.95	1.25	1.10	0.25	16.50		
Ch: 180.00 to 186.50	1	6.50	1.00	1.20	1.10	0.25	1.79		
13th Main road from KG Halli road LHS ch: 0 to 60.00	2	30.00	0.90	1.20	1.05	0.25	15.75		
Ch: 60.00 to 120.00	2	30.00	1.20	1.10	1.15	0.25	17.25		
Ch: 120.00 to 150.00	1	30.00	1.10	0.65	0.88	0.25	6.56		
13th Main road from KG Halli road LHS ch: 0 to 60.00	2	30.00	0.65	1.20	0.93	0.25	13.88		
Ch: 60.00 to 120.00	2	30.00	0.90	1.10	1.00	0.25	15.00		
Ch: 120.00 to 150.00	1	30.00	1.00	1.00	1.00	0.25	7.50		
Ch: 150.00 to 174.00	1	24.00	1.00	1.00	1.00	0.25	6.00		
1st Cross Road	2	27.20	1.00	1.20	1.10	0.25	14.96		
1st Cross Road	2	27.00	1.00	1.10	1.05	0.25	14.18		
1st Cross Road	2	26.50	1.00	0.90	0.95	0.25	12.59		
3rd Cross road , Ch: 0.00 to 30.00	1	30.00	2.50	2.75	2.63	0.30	23.63		
Ch: 30.00 to 60.00	1	30.00	2.75	3.20	2.98	0.30	26.78		
Ch: 60.00 to 78.00	1	18.00	3.20	2.80	3.00	0.30	16.20		
Ch: 78.00 to 108.00	1	30.00	5.00	5.30	5.15	0.30	46.35		
Ch: 108.00 to 121.00	1	13.00	5.30	5.50	5.40	0.30	21.06		
Ch: 121.00 to 151.00	1	30.00	5.50	6.50	6.00	0.30	54.00		
Rajeswari Enterprises Cross road Ch: 0.00 to 24.00	1	24.00	4.00	4.30	4.15	0.30	29.88		
Hotel resource Cross Road Ch: 0.00 to 25.50	1	25.50	4.00	4.25	4.13	0.30	31.56		
SLV Provision Store Cross road Ch: 0.00 to 30.00	1	30.00	4.90	4.10	4.50	0.30	40.50		
Ch: 30.00 to 60.00	1	30.00	4.10	4.30	4.20	0.30	37.80		
Ch: 60.00 to 90.00	1	30.00	4.30	4.30	4.30	0.30	38.70		
Ch: 90.00 to 120.00	1	30.00	4.30	4.60	4.45	0.30	40.05		
Ch: 120.00 to 150.00	1	30.00	4.60	4.30	4.45	0.30	40.05		
Ch: 150.00 to 166.50	1	16.50	4.30	4.30	4.30	0.30	21.29		
Adya Provision Store Cross road Sanitary line Ch: 0.00 to 30.00	1	30.00	1.20	1.15	1.18	0.50	17.63		
Sanitary line Ch: 30.00 to 60.00	1	30.00	1.15	1.25	1.20	0.50	18.00		
Sanitary line Ch: 60.00 to 90.00	1	30.00	1.25	0.95	1.10	0.50	16.50		
Sanitary line Ch: 90.00 to 120.00	1	30.00	0.95	1.10	1.03	0.50	15.38		
Sanitary line Ch: 120.00 to 146.00	1	26.00	1.10	1.25	1.18	0.50	15.28		
5th Cross Chikkasandra	2	30.00	5.80	4.00	4.90	0.30	88.20		
"_."	1	27.00	4.00	3.85	3.93	0.30	31.79		
Desilting									
16th Main road from KG Halli road LHS Ch: 0.00 to 60.00	2	30.00			0.50	0.45	13.50		
Ch: 60.00 to 62.10	1	2.10			0.50	0.45	0.47		

	Ch:62.10 to 122.10	2	30.00			0.50	0.45	13.50			
	Ch:122.10 to 152.10	1	30.00			0.50	0.45	6.75			
	Ch:152.10 to 156.10	1	4.00			0.50	0.45	0.90			
	16th Mainroad from KG Halli road RHS Ch: 30.00 to 60.0	1	30.00			0.50	0.45	6.75			
	Ch:62.10 to 122.10	1	2.10			0.50	0.45	0.47			
	Ch:122.10 to 152.10	1	30.00			0.50	0.45	6.75			
	15th Main road from KG Halli road LHS Ch: 0.00 to 60.00	2	30.00			0.50	0.45	13.50			
	Ch: 60.00 to 120.00	1	30.00			0.50	0.45	6.75			
	Ch: 120.00 to 132.00	1	12.00			0.50	0.45	2.70			
	15th Main road from KG Halli road RHS ch: 0 to 60.00	2	30.00			0.50	0.45	13.50			
	Ch: 60.00 to 120.00	1	30.00			0.50	0.45	6.75			
	Ch: 120.00 to 127.00	1	7.00			0.50	0.45	1.58			
	14th Main road from KG Halli road LHS ch: 0 to 60.00	2	30.00			0.50	0.45	13.50			
	Ch: 60.00 to 120.00	2	30.00			0.50	0.45	13.50			
	Ch: 120.00 to 141.00	1	21.00			0.50	0.45	4.73			
	14th Main road from KG Halli road RHS ch: 0 to 60.00	2	30.00			0.50	0.45	13.50			
	Ch: 60.00 to 120.00	2	30.00			0.50	0.45	13.50			
	Ch: 120.00 to 180.00	2	30.00			0.50	0.45	13.50			
	Ch: 180.00 to 186.50	1	6.50			0.50	0.45	1.46			
	13th Main road from KG Halli road LHS ch: 0 to 60.00	2	30.00			0.50	0.45	13.50			
	Ch: 60.00 to 120.00	2	30.00			0.50	0.45	13.50			
	Ch: 120.00 to 150.00	1	30.00			0.50	0.45	6.75			
	13th Main road from KG Halli road LHS ch: 0 to 60.00	2	30.00			0.50	0.45	13.50			
	Ch: 60.00 to 120.00	2	30.00			0.50	0.45	13.50			
	Ch: 120.00 to 150.00	1	30.00			0.50	0.45	6.75			
		1	24.00			0.50	0.45	5.40			
	1st Cross Road	2	27.20			0.50	0.45	12.24			
	1st Cross Road	2	27.00			0.50	0.45	12.15			
	1st Cross Road	2	26.50			0.50	0.45	11.93			
	3rd Cross Road Ch: 0.00 to 150	3	30.00			0.60	0.50	27.00			
	"_" Ch: 150.0 to 175.0	1	25.00			0.60	0.50	7.50			
	SLV Provision store Cross Road LHS Ch:0.00to 150.0	5	30.00			0.60	0.50	45.00			
	Ch:150.00to 166.20	1	16.20			0.60	0.50	4.86			
	SLV Provision store Cross Road RHS Ch:0.00to 150.0	5	30.00			0.60	0.50	45.00			
	Adya Provision Stpre Cross road LHS Ch: 0.00 to 150	5	30.00			0.60	0.60	54.00			
	Adya Provision Stpre Cross road RHS Ch: 0.00 to 150	5	30.00			0.60	0.60	54.00			
	Rate: As per Schedule B (Rs 233.20)	Qty executed Up to 125% of 1593.45						1753.99	Cum	233.20	409031.00
3	Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per the specification & as per direction of Engineer-in-charge of the work (page No147, Item No 19.64/ PWD SR 2018-19)										
	16th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	7.90	6.20	7.05		211.50			
	Ch: 30.00 to 60.00	1	30.00	6.20	4.80	5.50		165.00			
	Ch: 60.00 to 62.10	1	2.10	4.80	4.80	4.80		10.08			
	Ch:62.10 to 92.10	1	30.00	4.80	5.00	4.90		147.00			
	Ch:92.10 to 122.10	1	30.00	5.00	6.40	5.70		171.00			
	Ch:122.10 to 152.10	1	30.00	6.40	6.20	6.30		189.00			
	Ch:152.10 to 156.10	1	4.00	6.20	6.75	6.48		25.90			
	15th Main road from KG Halli road LHS Ch: 0.00 to 60.00	2	30.00	0.85	1.00	0.93		55.50			
	Ch: 60.00 to 120.00	2	30.00	1.00	0.90	0.95		57.00			
	Ch: 120.00 to 132.00	2	12.00	0.90	1.10	1.00		24.00			
	15th Main road from KG Halli road RHS ch: 0 to 60.00	2	30.00	1.10	0.80	0.95		57.00			
	Ch: 60.00 to 120.00	2	30.00	0.80	1.25	1.03		61.50			
	Ch: 120.00 to 127.00	1	7.00	0.85	1.00	0.93		6.48			
	14th Main road from KG Halli road LHS ch: 0 to 60.00	2	30.00	0.90	1.10	1.00		60.00			
	Ch: 60.00 to 120.00	2	30.00	2.50	2.15	2.33		139.50			

	Ch: 120.00 to 141.00	1	21.00	0.75	1.05	0.90		18.90			
12th Main road from KG Halli road RHS	Ch: 0 to 60.00	2	30.00	0.95	1.25	1.10		66.00			
	Ch: 60.00 to 120.00	2	30.00	1.25	0.75	1.00		60.00			
	Ch: 120.00 to 180.00	2	30.00	0.95	1.25	1.10		66.00			
	Ch: 180.00 to 186.50	1	6.50	1.00	1.20	1.10		7.15			
13th Main road from KG Halli road LHS	Ch: 0 to 60.00	2	30.00	0.90	1.20	1.05		63.00			
	Ch: 60.00 to 120.00	2	30.00	1.20	1.10	1.15		69.00			
	Ch: 120.00 to 150.00	1	30.00	1.10	0.65	0.88		26.25			
13th Main road from KG Halli road LHS	Ch: 0 to 60.00	2	30.00	0.65	1.20	0.93		55.50			
	Ch: 60.00 to 120.00	2	30.00	0.90	1.10	1.00		60.00			
	Ch: 120.00 to 150.00	1	30.00	1.00	1.00	1.00		30.00			
	Ch: 150.00 to 174.00	1	24.00	1.00	1.00	1.00		24.00			
1st Cross Road		2	27.20	1.00	1.20	1.10		59.84			
1st Cross Road		2	27.00	1.00	1.10	1.05		56.70			
1st Cross Road		2	26.50	1.00	0.90	0.95		50.35			
3rd Cross road ,	Ch: 0.00 to 30.00	1	30.00	2.50	2.75	2.63		78.75			
	Ch: 30.00 to 60.00	1	30.00	2.75	3.20	2.98		89.25			
	Ch: 60.00 to 78.00	1	18.00	3.20	2.80	3.00		54.00			
	Ch: 78.00 to 108.00	1	30.00	5.00	5.30	5.15		154.50			
	Ch: 108.00 to 121.00	1	13.00	5.30	5.50	5.40		70.20			
	Ch: 121.00 to 151.00	1	30.00	5.50	6.50	6.00		180.00			
Rajeswari Enterprises Cross road	Ch: 0.00 to 24.00	1	24.00	4.00	4.30	4.15		99.60			
Hotel resource Cross Road	Ch: 0.00 to 25.50	1	25.50	4.00	4.25	4.13		105.19			
SLV Provision Store Cross road	Ch: 0.00 to 30.00	1	30.00	4.90	4.10	4.50		135.00			
	Ch: 30.00 to 60.00	1	30.00	4.10	4.30	4.20		126.00			
	Ch: 60.00 to 90.00	1	30.00	4.30	4.30	4.30		129.00			
	Ch: 90.00 to 120.00	1	30.00	4.30	4.60	4.45		133.50			
	Ch: 120.00 to 150.00	1	30.00	4.60	4.30	4.45		133.50			
	Ch: 150.00 to 166.50	1	16.50	4.30	4.30	4.30		70.95			
Adya Provision Store Cross road Sanitary line	Ch: 0.00 to 30.00	1	30.00	1.20	1.15	1.18		35.25			
	Sanitary line Ch: 30.00 to 60.00	1	30.00	1.15	1.25	1.20		36.00			
	Sanitary line Ch: 60.00 to 90.00	1	30.00	1.25	0.95	1.10		33.00			
	Sanitary line Ch: 90.00 to 120.00	1	30.00	0.95	1.10	1.03		30.75			
	Sanitary line Ch: 120.00 to 146.00	1	26.00	1.10	1.25	1.18		30.55			
5th Cross Chikkasandra		2	30.00	5.80	4.00	4.90		294.00			
"-"		1	27.00	4.00	3.85	3.93		105.98			
Rate: As per Schedule B (Rs 6.36)			Qty executed Up to 125% of (4129.50Sqm)					4218.11	Sqm	6.36	26828.00
Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. complete as per the specification & as per direction of Engineer-in-charge of the work (page No153, Item No20.5/ PWD SR 2018-19)											
	16th Main road from KG Halli road	Ch: 0.00 to 30.00	1	30.00	7.90	6.20	7.05	0.15	31.73		
		Ch: 30.00 to 60.00	1	30.00	6.20	4.80	5.50	0.15	24.75		
		Ch: 60.00 to 62.10	1	2.10	4.80	4.80	4.80	0.15	1.51		
		Ch: 62.10 to 92.10	1	30.00	4.80	5.00	4.90	0.15	22.05		
		Ch: 92.10 to 122.10	1	30.00	5.00	6.40	5.70	0.15	25.65		
		Ch: 122.10 to 152.10	1	30.00	6.40	6.20	6.30	0.15	28.35		
		Ch: 152.10 to 156.10	1	4.00	6.20	6.75	6.48	0.15	3.89		
	Rajeswari Enterprises Cross road	Ch: 0.00 to 24.00	1	24.00	4.00	4.30	4.15	0.15	14.94		
	Hotel resource Cross Road	Ch: 0.00 to 25.50	1	25.50	4.00	4.25	4.13	0.15	15.78		
	Adya Provision Store Cross road Sanitary line	Ch: 0.00 to 30.00	1	30.00	1.20	1.15	1.18	0.30	10.58		
		Sanitary line Ch: 30.00 to 60.00	1	30.00	1.15	1.25	1.20	0.30	10.80		
		Sanitary line Ch: 60.00 to 90.00	1	30.00	1.25	0.95	1.10	0.30	9.90		
		Sanitary line Ch: 90.00 to 120.00	1	30.00	0.95	1.10	1.03	0.30	9.23		
		Sanitary line Ch: 120.00 to 146.00	1	26.00	1.10	1.25	1.18	0.30	9.17		

5th Cross Chikkasandra	2	30.00	5.80	4.00	4.90	0.15	44.10			
"_"	1	27.00	4.00	3.85	3.93	0.15	15.90			
Rate: As per Schedule B (Rs 1400)	Qty executed Up to 125% of (1062.40 Cum)						278.30	Cum	1400.00	389622.00
Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per the specification & as per direction of Engineer-in-charge of the work (page No155, Item No 20.18/ PWD SR 2018-19)										
16th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	7.90	6.20	7.05	0.15	31.73			
Ch: 30.00 to 60.00	1	30.00	6.20	4.80	5.50	0.15	24.75			
Ch: 60.00 to 62.10	1	2.10	4.80	4.80	4.80	0.15	1.51			
Ch: 62.10 to 92.10	1	30.00	4.80	5.00	4.90	0.15	22.05			
Ch: 92.10 to 122.10	1	30.00	5.00	6.40	5.70	0.15	25.65			
Ch: 122.10 to 152.10	1	30.00	6.40	6.20	6.30	0.15	28.35			
Ch: 152.10 to 156.10	1	4.00	6.20	6.75	6.48	0.15	3.89			
15th Main road from KG Halli road LHS Ch: 0.00 to 60.00	2	30.00	0.85	1.00	0.93	0.15	8.33			
Ch: 60.00 to 120.00	2	30.00	1.00	0.90	0.95	0.15	8.55			
Ch: 120.00 to 132.00	2	12.00	0.90	1.10	1.00	0.15	3.60			
15th Main road from KG Halli road RHS ch: 0 to 60.00	2	30.00	1.10	0.80	0.95	0.15	8.55			
Ch: 60.00 to 120.00	2	30.00	0.80	1.25	1.03	0.15	9.23			
Ch: 120.00 to 127.00	1	7.00	0.85	1.00	0.93	0.15	0.97			
14th Main road from KG Halli road LHS ch: 0 to 60.00	2	30.00	0.90	1.10	1.00	0.15	9.00			
Ch: 60.00 to 120.00	2	30.00	2.50	2.15	2.33	0.15	20.93			
Ch: 120.00 to 141.00	1	21.00	0.75	1.05	0.90	0.15	2.84			
14th Main road from KG Halli road RHS ch: 0 to 60.00	2	30.00	0.95	1.25	1.10	0.15	9.90			
Ch: 60.00 to 120.00	2	30.00	1.25	0.75	1.00	0.15	9.00			
Ch: 120.00 to 180.00	2	30.00	0.95	1.25	1.10	0.15	9.90			
Ch: 180.00 to 186.50	1	6.50	1.00	1.20	1.10	0.15	1.07			
13th Main road from KG Halli road LHS ch: 0 to 60.00	2	30.00	0.90	1.20	1.05	0.15	9.45			
Ch: 60.00 to 120.00	2	30.00	1.20	1.10	1.15	0.15	10.35			
Ch: 120.00 to 150.00	1	30.00	1.10	0.65	0.88	0.15	3.94			
13th Main road from KG Halli road LHS ch: 0 to 60.00	2	30.00	0.65	1.20	0.93	0.15	8.33			
Ch: 60.00 to 120.00	2	30.00	0.90	1.10	1.00	0.15	9.00			
Ch: 120.00 to 150.00	1	30.00	1.00	1.00	1.00	0.15	4.50			
Ch: 150.00 to 174.00	1	24.00	1.00	1.00	1.00	0.15	3.60			
Rajeswari Enterprises Cross road Ch: 0.00 to 24.00	1	24.00	4.00	4.30	4.15	0.15	14.94			
Hotel resource Cross Road Ch: 0.00 to 25.50	1	25.50	4.00	4.25	4.13	0.15	15.78			
3rd Cross road , Ch: 0.00 to 30.00	1	30.00	2.50	2.75	2.63	0.10	7.88			
Ch: 30.00 to 60.00	1	30.00	2.75	3.20	2.98	0.10	8.93			
Ch: 60.00 to 78.00	1	18.00	3.20	2.80	3.00	0.10	5.40			
Ch: 78.00 to 108.00	1	30.00	5.00	5.30	5.15	0.10	15.45			
Ch: 108.00 to 121.00	1	13.00	5.30	5.50	5.40	0.10	7.02			
Ch: 121.00 to 151.00	1	30.00	5.50	6.50	6.00	0.10	18.00			
Rajeswari Enterprises Cross road Ch: 0.00 to 24.00	1	24.00	4.00	4.30	4.15	0.10	9.96			
Adya Provision Store Cross road Sanitary line Ch: 0.00 to 30.00	1	30.00	1.20	1.15	1.18	0.10	3.53			
Sanitary line Ch: 30.00 to 60.00	1	30.00	1.15	1.25	1.20	0.10	3.60			
Sanitary line Ch: 60.00 to 90.00	1	30.00	1.25	0.95	1.10	0.10	3.30			
Sanitary line Ch: 90.00 to 120.00	1	30.00	0.95	1.10	1.03	0.10	3.08			
Sanitary line Ch: 120.00 to 146.00	1	26.00	1.10	1.25	1.18	0.10	3.06			
5th Cross Chikkasandra	2	30.00	5.80	4.00	4.90	0.15	44.10			
"_"	1	27.00	4.00	3.85	3.93	0.15	15.90			
Rate: As per Schedule B (Rs 1600)	Qty executed Up to 125% of (929.14 Cum)						468.84	Cum	1600.00	750141.00
Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per the specification & as per direction of Engineer-in-charge of the work (page No158, Item No 21.6/ PWD SR 2018-19 Issue rate 01-07-2020)										

	16th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	7.90	6.20	7.05		211.50			
	Ch: 30.00 to 60.00	1	30.00	6.20	4.80	5.50		165.00			
	Ch: 60.00 to 62.10	1	2.10	4.80	4.80	4.80		10.08			
	Ch:62.10 to 92.10	1	30.00	4.80	5.00	4.90		147.00			
	Ch:92.10 to 122.10	1	30.00	5.00	6.40	5.70		171.00			
	Ch:122.10 to 152.10	1	30.00	6.40	6.20	6.30		189.00			
	Ch:152.10 to 156.10	1	4.00	6.20	6.75	6.48		25.90			
	15th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	6.50	5.00	5.75		172.50			
	Ch: 30.00 to 60.00	1	30.00	5.00	5.00	5.00		150.00			
	Ch: 60.00 to 72.00	1	12.00	5.00	5.00	5.00		60.00			
	Ch:72.00 to 102.00	1	30.00	5.00	5.25	5.13		153.75			
	Ch:102.00 to 132.00	1	30.00	5.25	5.50	5.38		161.25			
	Ch:132.00 to 162.00	1	30.00	5.50	5.00	5.25		157.50			
	Ch:162.00 to 179.00	1	17.00	5.00	5.20	5.10		86.70			
	14th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	5.20	4.80	5.00		150.00			
	Ch: 30.00 to 60.00	1	30.00	4.80	4.20	4.50		135.00			
	Ch: 60.00 to 81.00	1	21.00	4.20	4.60	4.40		92.40			
	Ch: 81.00 to 111.00	1	30.00	4.60	4.20	4.40		132.00			
	Ch:111.00 to 141.00	1	30.00	4.20	3.80	4.00		120.00			
	Ch:141.00 to 171.00	1	30.00	3.80	4.60	4.20		126.00			
	Ch:171.00 to 117.50	1	16.50	4.60	5.00	4.80		79.20			
	13th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	5.20	4.80	5.00		150.00			
	Ch: 30.00 to 60.00	1	30.00	4.80	4.30	4.55		136.50			
	Ch: 60.00 to 90.00	1	30.00	4.30	5.00	4.65		139.50			
	Ch: 90.00 to 120.00	1	30.00	5.00	4.50	4.75		142.50			
	Ch: 120.00 to 150.00	1	30.00	4.50	4.70	4.60		138.00			
	Ch: 150.00 to 180.00	1	30.00	4.70	5.20	4.95		148.50			
	Ch: 180.00 to 204.00	1	24.00	5.20	5.20	5.20		124.80			
	1st Cross Road	1	27.20	5.30	4.30	4.80		130.56			
	1st Cross Road	1	27.00	5.50	5.00	5.25		141.75			
	1st Cross Road	1	26.50	4.40	5.40	4.90		129.85			
	Rate: As per Schedule B (Rs 29.68)		Qty executed Up to 125% of (4129.50Sqm)					4077.74	Sqm	29.68	121028.00
7	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per the specification & as per direction of Engineer-in-charge of the work(Issued Rate 01/07/2020) (page No158, Item No 21.7/ PWD SR 2018-19 Issue rate 01-07-2020)										
	16th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	7.90	6.20	7.05		211.50			
	Ch: 30.00 to 60.00	1	30.00	6.20	4.80	5.50		165.00			
	Ch: 60.00 to 62.10	1	2.10	4.80	4.80	4.80		10.08			
	Ch:62.10 to 92.10	1	30.00	4.80	5.00	4.90		147.00			
	Ch:92.10 to 122.10	1	30.00	5.00	6.40	5.70		171.00			
	Ch:122.10 to 152.10	1	30.00	6.40	6.20	6.30		189.00			
	Ch:152.10 to 156.10	1	4.00	6.20	6.75	6.48		25.90			
	Rate: As per Schedule B (Rs 12.72)		Qty executed Up to 125% of (4129.50Sqm)					919.48	Sqm	12.72	11696.00
8	Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II Cum (50 mm to 75 mm) with 4.5 % VG-30 Bitumen .complete as per the specification & as per direction of Engineer-in-charge of the work (page No160, Item No 21.17.6/ PWD SR 2018-19)										
	16th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	7.90	6.20	7.05	0.05	10.58			
	Ch: 30.00 to 60.00	1	30.00	6.20	4.80	5.50	0.05	8.25			
	Ch: 60.00 to 62.10	1	2.10	4.80	4.80	4.80	0.05	0.50			
	Ch:62.10 to 92.10	1	30.00	4.80	5.00	4.90	0.05	7.35			
	Ch:92.10 to 122.10	1	30.00	5.00	6.40	5.70	0.05	8.55			
	Ch:122.10 to 152.10	1	30.00	6.40	6.20	6.30	0.05	9.45			

	Ch:152.10 to 156.10	1	4.00	6.20	6.75	6.48	0.05	1.30				
	Rate: As per Schedule B (Rs 8500)	Qty executed Up to 125% of (218.30 Cum)							45.97	Cum	8500.00	390779.00
9	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) complete as per the specification & as per direction of Engineer-in-charge of the work (page No 162, Item No 21.78.12/ PWD SR 2018-19) Issue Rate 01-07-2020)											
	16th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	7.90	6.20	7.05	0.03	6.35				
	Ch: 30.00 to 60.00	1	30.00	6.20	4.80	5.50	0.03	4.95				
	Ch: 60.00 to 62.10	1	2.10	4.80	4.80	4.80	0.03	0.30				
	Ch:62.10 to 92.10	1	30.00	4.80	5.00	4.90	0.03	4.41				
	Ch:92.10 to 122.10	1	30.00	5.00	6.40	5.70	0.03	5.13				
	Ch:122.10 to 152.10	1	30.00	6.40	6.20	6.30	0.03	5.67				
	Ch:152.10 to 156.10	1	4.00	6.20	6.75	6.48	0.03	0.78				
	15th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	6.50	5.00	5.75	0.04	6.90				
	Ch: 30.00 to 60.00	1	30.00	5.00	5.00	5.00	0.04	6.00				
	Ch: 60.00 to 72.00	1	12.00	5.00	5.00	5.00	0.04	2.40				
	Ch:72.00 to 102.00	1	30.00	5.00	5.25	5.13	0.04	6.15				
	Ch:102.00 to 132.00	1	30.00	5.25	5.50	5.38	0.04	6.45				
	Ch:132.00 to 162.00	1	30.00	5.50	5.00	5.25	0.04	6.30				
	Ch:162.00 to 179.00	1	17.00	5.00	5.20	5.10	0.04	3.47				
	14th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	5.20	4.80	5.00	0.04	6.00				
	Ch: 30.00 to 60.00	1	30.00	4.80	4.20	4.50	0.04	5.40				
	Ch: 60.00 to 81.00	1	21.00	4.20	4.60	4.40	0.04	3.70				
	Ch: 81.00 to 111.00	1	30.00	4.60	4.20	4.40	0.04	5.28				
	Ch:111.00 to 141.00	1	30.00	4.20	3.80	4.00	0.04	4.80				
	Ch:141.00 to 171.00	1	30.00	3.80	4.60	4.20	0.04	5.04				
	Ch:171.00 to 117.50	1	16.50	4.60	5.00	4.80	0.04	3.17				
	13th Main road from KG Halli road Ch: 0.00 to 30.00	1	30.00	5.20	4.80	5.00	0.04	6.00				
	Ch: 30.00 to 60.00	1	30.00	4.80	4.30	4.55	0.04	5.46				
	Ch: 60.00 to 90.00	1	30.00	4.30	5.00	4.65	0.04	5.58				
	Ch: 90.00 to 120.00	1	30.00	5.00	4.50	4.75	0.04	5.70				
	Ch: 120.00 to 150.00	1	30.00	4.50	4.70	4.60	0.04	5.52				
	Ch: 150.00 to 180.00	1	30.00	4.70	5.20	4.95	0.04	5.94				
	Ch: 180.00 to 204.00	1	24.00	5.20	5.20	5.20	0.04	4.99				
	1st Cross Road	1	27.20	5.30	4.30	4.80	0.04	5.22				
	1st Cross Road	1	27.00	5.50	5.00	5.25	0.04	5.67				
	1st Cross Road	1	26.50	4.40	5.40	4.90	0.04	5.19				
	Rate: As per Schedule B (Rs 14500)	Qty executed Up to 125% of (130.98 Cum)							153.91	Cum	14500.00	2231765.00
10	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/Concrete Surface: Providing and laying of hot applied thermoplasticcompound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per the specification & as per direction of Engineer-in-charge of the work (page No 146, Item No 19.52/ PWD SR 2018-19)											
	16th Main road from KG Halli road Ch: 0.00 to 30.00	2.5	30.00			0.15		11.25				
	Ch: 30.00 to 60.00	2.5	30.00			0.15		11.25				
	Ch: 60.00 to 62.10	2.5	2.10			0.15		0.79				
	Ch:62.10 to 92.10	2.5	30.00			0.15		11.25				
	Ch:92.10 to 122.10	2.5	30.00			0.15		11.25				
	Ch:122.10 to 152.10	2.5	30.00			0.15		11.25				
	Ch:152.10 to 156.10	2.5	4.00			0.15		1.50				
	15th Main road from KG Halli road Ch: 0.00 to 30.00	2.5	30.00			0.15		11.25				
	Ch: 30.00 to 60.00	2.5	30.00			0.15		11.25				
	Ch: 60.00 to 72.00	2.5	12.00			0.15		4.50				

	Ch:72.00 to 102.00	2.5	30.00			0.15		11.25			
	Ch:102.00 to 132.00	2.5	30.00			0.15		11.25			
	Ch:132.00 to 162.00	2.5	30.00			0.15		11.25			
	Ch:162.00 to 179.00	2.5	17.00			0.15		6.38			
14th Main road from KG Halli road	Ch: 0.00 to 30.00	2.5	30.00			0.15		11.25			
	Ch: 30.00 to 60.00	2.5	30.00			0.15		11.25			
	Ch: 60.00 to 81.00	2.5	21.00			0.15		7.88			
	Ch: 81.00 to 111.00	2.5	30.00			0.15		11.25			
	Ch:111.00 to 141.00	2.5	30.00			0.15		11.25			
	Ch:141.00 to 171.00	2.5	30.00			0.15		11.25			
	Ch:171.00 to 117.50	2.5	16.50			0.15		6.19			
13th Main road from KG Halli road	Ch: 0.00 to 30.00	2.5	30.00			0.15		11.25			
	Ch: 30.00 to 60.00	2.5	30.00			0.15		11.25			
	Ch: 60.00 to 90.00	2.5	30.00			0.15		11.25			
	Ch: 90.00 to 120.00	2.5	30.00			0.15		11.25			
	Ch: 120.00 to 150.00	2.5	30.00			0.15		11.25			
	Ch: 150.00 to 180.00	2.5	30.00			0.15		11.25			
	Ch: 180.00 to 204.00	2.5	24.00			0.15		9.00			
1st Cross Road		2.5	27.20			0.15		10.20			
1st Cross Road		2.5	27.00			0.15		10.13			
1st Cross Road		2.5	26.50			0.15		9.94			
Rate: As per Schedule B (Rs 450)			Qty executed Up to 125% of (274.50Cum)					302.74	Cum	450.00	136232.00
11	Cement Concrete Pavements KSRRB M600-1. Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016, aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601 of MORTH V Revision and IS 456 Table-5 -do- with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with fixed form paver. complete as per the specification & as per direction of Engineer-in-charge of the work (Page No 174, Item No22.1.2/ PWD SR 2018-19) Issue Rate 02-11-2021										
	3rd Cross road ,	Ch: 0.00 to 30.00	1	30.00	2.50	2.75	2.63	0.15	11.81		
		Ch: 30.00 to 60.00	1	30.00	2.75	3.20	2.98	0.15	13.39		
		Ch: 60.00 to 78.00	1	18.00	3.20	2.80	3.00	0.15	8.10		
		Ch: 78.00 to 108.00	1	30.00	5.00	5.30	5.15	0.15	23.18		
		Ch: 108.00 to 121.00	1	13.00	5.30	5.50	5.40	0.15	10.53		
		Ch: 121.00 to 151.00	1	30.00	5.50	6.50	6.00	0.15	27.00		
	Rajeswari Enterprises Cross road	Ch: 0.00 to 24.00	1	24.00	4.00	4.30	4.15	0.15	14.94		
	Hotel resource Cross Road	Ch: 0.00 to 25.50	1	25.50	4.00	4.25	4.13	0.15	15.78		
	SLV Provision Store Cross road	Ch: 0.00 to 30.00	1	30.00	4.90	4.10	4.50	0.15	20.25		
		Ch: 30.00 to 60.00	1	30.00	4.10	4.30	4.20	0.15	18.90		
	Ch: 60.00 to 90.00	1	30.00	4.30	4.30	4.30	0.15	19.35			
	Ch: 90.00 to 120.00	1	30.00	4.30	4.60	4.45	0.15	20.03			
	Ch: 120.00 to 150.00	1	30.00	4.60	4.30	4.45	0.15	20.03			
	Ch: 150.00 to 166.50	1	16.50	4.30	4.30	4.30	0.15	10.64			
Adya Provision Store Cross road Sanitary line	Ch: 0.00 to 30.00	1	30.00	1.20	1.15	1.18	0.15	5.29			
	Sanitary line Ch: 30.00 to 60.00	1	30.00	1.15	1.25	1.20	0.15	5.40			
	Sanitary line Ch: 60.00 to 90.00	1	30.00	1.25	0.95	1.10	0.15	4.95			
	Sanitary line Ch: 90.00 to 120.00	1	30.00	0.95	1.10	1.03	0.15	4.61			
	Sanitary line Ch: 120.00 to 146.00	1	26.00	1.10	1.25	1.18	0.15	4.58			
5th Cross Chikkasandra	Ch: 0.00 to 60.00	2	30.00	5.80	4.00	4.90	0.15	44.10			
	Ch: 60.00 to 87.00	1	27.00	4.00	3.85	3.93	0.15	15.90			
								318.74			
Rate As per Schedule B (Rs 3900.00)			Qty executed Up to 125% of 152.25Cum					190.31	Cum	3900.00	742219.00
Rate: As per CSR 2018-19			Qty executed Above 125%					128.43	Cum	4255.64	546560.00
Basic Rate			3585.00								

Deduct Cement Cost As per estimate		-792.18	(150/50)*264.06	-792.18					
Add Cement Cost As per Issue	Rate 02-11-21	1047.00	(150/50)*349	1047.00					
Sub Total		3839.82							
Area weightage 6%		215.10							
Total Rate		4054.92							
Add T P 4.95%		200.72							
Arrived Rate		4255.64							
Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum, Coarse and fine aggregate conforming to IS 383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rammers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermeable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour, hire charges of machineries, all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum and coarse aggregate 0.69 cum, fine aggregate 0.46 cum. (complete as per the specification & as per direction of Engineer-in-charge of the work (page No 136, Item No 17.1/ PWD SR 2018-19) Issue Rate 02-11-2021									
3rd Cross road ,	Ch: 0.00 to 30.00	1	30.00	5.00	4.20	4.60	0.15	20.70	
	Ch: 30.00 to 60.00	1	30.00	4.20	4.30	4.25	0.15	19.13	
	Ch: 60.00 to 78.00	1	18.00	4.30	5.00	4.65	0.15	12.56	
	Ch: 78.00 to 108.00	1	30.00	5.00	5.30	5.15	0.15	23.18	
	Ch: 108.00 to 121.00	1	13.00	5.30	5.50	5.40	0.15	10.53	
	Ch: 121.00 to 151.00	1	30.00	5.50	6.50	6.00	0.15	27.00	
Rajeswari Enterprises Cross road	Ch: 0.00 to 24.00	1	24.00	4.00	4.30	4.15	0.15	14.94	
Hotel resource Cross Road	Ch: 0.00 to 25.50	1	25.50	4.00	4.25	4.13	0.15	15.78	
SLV Provision Store Cross road	Ch: 0.00 to 30.00	1	30.00	4.90	4.10	4.50	0.15	20.25	
	Ch: 30.00 to 60.00	1	30.00	4.10	4.30	4.20	0.15	18.90	
	Ch: 60.00 to 90.00	1	30.00	4.30	4.30	4.30	0.15	19.35	
	Ch: 90.00 to 120.00	1	30.00	4.30	4.60	4.45	0.15	20.03	
	Ch: 120.00 to 150.00	1	30.00	4.60	4.30	4.45	0.15	20.03	
	Ch: 150.00 to 166.50	1	16.50	4.30	4.30	4.30	0.15	10.64	
Adya Provision Store Cross road Sanitary line	Ch: 0.00 to 30.00	1	30.00	6.90	6.20	6.55	0.15	29.48	
	Sanitary line Ch: 30.00 to 60.00	1	30.00	6.20	6.40	6.30	0.15	28.35	
	Sanitary line Ch: 60.00 to 90.00	1	30.00	6.40	6.50	6.45	0.15	29.03	
	Sanitary line Ch: 90.00 to 120.00	1	30.00	6.50	5.50	6.00	0.15	27.00	
	Sanitary line Ch: 120.00 to 146.00	1	25.60	5.50	4.50	5.00	0.15	19.20	
12th Main road from KG Halli road		2	30.00	5.20	4.80	5.00	0.15	45.00	
5th Cross Chikkasandra	Ch: 0.00 to 60.00	2	30.00	5.80	4.00	4.90	0.15	44.10	
	Ch: 60.00 to 87.00	1	27.00	4.00	3.85	3.93	0.15	15.90	
								491.04	Cum
Rate As per Schedule B (Rs 5800.00)		Qty executed Up to 125% of 152.25 Cum						190.31	Cum
Rate: As per CSR 2018-19		Qty executed Above 125%						300.73	Cum
Basic Rate		4916.00							
Deduct Cement Cost As per estimate		-1901.23	(360/50)*264.06	-1901.23					
Add Cement Cost As per Issue	Rate 02-11-21	2512.80	(360/50)*349	2512.80					
Sub Total		5527.57							
Area weightage 6%		294.96							
Total Rate		5822.53							
Add T P 4.95%		288.22							
Arrived Rate		6110.74							

ERIL 1 Providing and fixing precast reinforced cement concrete covering slabs of 10cm thick made out of M25 with OPC cement 340kgs per cum , 20mm and down size graded granite metal coarse aggregates @ 0.70cum and fine aggregates @ 0.74 cum with super plasticizers, machine mixed , including providing and removing centering, shuttering strutting propping etc., for edges of slab with TMT steel (Fe500) cost & reinforcement charges including finishing as required with cost of reinforcement etc., complete as directed by engineer incharge of the work									
	315	0.60	0.90				170.10		
Aproved Rate Rs	1615.00						170.10	Sqm	288310.00
Add T P 4.95%	79.94								
Arrived Rate	1694.94								
							Total Cost		9241545.00

Certificate:

- 1 Certified that the work spot has been inspected by me and work is necessary.
- 2 Certified that the work is not split up
- 3 Certified that the estimate is prepared based on PWD SR 2018-19 As per Issue rate 02-11-2021
- 4 Certified that Adequete & necessary provisions have made in the estimate
- 5 Certified that the above area comes under BBMP limit.
- 6 Certified that this work is not included in other work taken up

K. Saccu-son
Assistant Engineer
Ward No 12

[Signature]
Assistant Executive Engineer
Shettyhalli Sub Division

[Signature]
Executive Engineer
Dasarahalli Division

Technically Sanctioned for Rs. <u>92.41 lakhs/-</u>	
Rs. In words <u>Rs. Ninety Two Lakhs Four</u>	
<u>hundred Fifty Four thousand Five hundred</u>	
Under <u>P-2178</u>	
Job Code No. <u>012-20-000037</u>	
Registered as CE No. <u>CE/02/TS/45/21-22</u>	
to conditions contained in Enclosed Memo	
No. <u>CE/02/TS/45/21-22</u> Dt. <u>10/01/2024</u>	
AE/JE	TA
	CE(D)

BRUHAT BANGALORE MAHANAGARA PALIKE

Executive Engineer-Dasarahalli Division

Detailed Estimate

Name of the Work : Improvements of Road and Drain in KG Halli Gurunath Layout and Surrounding area in Ward No.12 Shettyhalli Sub Division.

Jobcode: 012-20-000037

Pcode: P2178

Estimate Amount : 100.00 Lakhs

Sl. No.	Particulars	No	L	B	D	Quantity	Rate	Amount
1	Removing & Refixing stone slabs of drains and pointing in C.M (1:3) (KPWD SR 2018-19, Page No.27, Item No.5.33)							
	12th main road from KG Halli road	2	52.00	3.00		312.00		
	14th main road from KG Halli road	2	75.00	3.00		450.00		
	15th main road from KG Halli road	2	80.00	3.00		480.00		
	16th main road from KG Halli road	2	90.00	3.00		540.00		
	cross road from KG Halli road	2	58.00	3.00		348.00		
	2nd cross road from KG Halli road	2	40.00	3.00		240.00		
	3rd cross road from KG Halli road	2	45.00	3.00		270.00		
	4th cross road from KG Halli road	2	33.00	3.00		198.00		
	5th cross road from KG Halli road	2	38.00	3.00		228.00		
					Total	3066.00	111.30	341245.80
						Sqm		
	Basic rate	105.00						
	Area Wiegthage @ 6%	6.30						
	Total Rate in Rs	111.30						
2	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (KPWD SR 2018-19, Page No.143, Item No.19.1)							
	12th main road from KG Halli road	1	170.00	7.50	0.30	382.50		
	14th main road from KG Halli road	1	188.00	5.50	0.30	310.20		
	15th main road from KG Halli road	1	87.00	5.50	0.30	143.55		
	16th main road from KG Halli road	1	40.00	5.50	0.30	66.00		
	cross road from KG Halli road	1	86.00	5.50	0.30	141.90		
	2nd cross road from KG Halli road	1	32.00	5.50	0.30	52.80		
	3rd cross road from KG Halli road	1	45.00	5.50	0.30	74.25		
	4th cross road from KG Halli road	1	43.00	5.50	0.30	70.95		
	5th cross road from KG Halli road	1	43.00	5.50	0.30	70.95		
	Cross road 1	1	58.00	3.50	0.30	60.90		
	Cross road 2	1	41.00	3.50	0.30	43.05		
	Cross road 3	1	58.00	3.50	0.30	60.90		
	Cross road 4	1	110.00	3.50	0.30	115.50		
					Total	1593.45	233.20	371592.54
						Cum		
	Basic rate	130.00						
	Lead=2x1.28x15km=95.40	95.40						
	Area Wiegth age @ 6%	7.80						
	Total Rate in Rs	233.20						
3	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occurring during rolling including cost of all labour, HOM complete as per specifications. MORTH I Chapter 3(KPWD SR 2018-19, Page No.147, Item No.19.64)							
	12th main road from KG Halli road	1	170.00	7.50		1275.00		
	14th main road from KG Halli road	1	188.00	5.50		1034.00		
	15th main road from KG Halli road	1	87.00	5.50		478.50		
	16th main road from KG Halli road	1	40.00	5.50		220.00		
	cross road from KG Halli road	1	86.00	5.50		473.00		
	2nd cross road from KG Halli road	1	32.00	5.50		176.00		
	3rd cross road from KG Halli road	1	43.00	5.50		236.50		
	4th cross road from KG Halli road	1	43.00	5.50		236.50		
	5th cross road from KG Halli road	1	43.00	5.50		236.50		
					Total	4129.50	6.36	26263.62
						Sqm		
	Basic rate	6.00						
	Area Wiegth age @ 6%	0.36						
	Total Rate in Rs	6.36						

Sl. No.	Particulars	No	L	B	D	Quantity	Rate	Amount
4	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision. (KPWD SR 2018-19, Page No.153, Item No.20.5)							
	12th main road from KG Halli road	1	170.00	7.50	0.20	255.00		
	14th main road from KG Halli road	1	188.00	5.50	0.20	206.80		
	15th main road from KG Halli road	1	87.00	5.50	0.20	95.70		
	16th main road from KG Halli road	1	40.00	5.50	0.20	44.00		
	cross road from KG Halli road	1	86.00	5.50	0.20	94.60		
	2nd cross road from KG Halli road	1	32.00	5.50	0.20	35.20		
	3rd cross road from KG Halli road	1	43.00	5.50	0.20	47.30		
	4th cross road from KG Halli road	1	43.00	5.50	0.20	47.30		
	5th cross road from KG Halli road	1	43.00	5.50	0.20	236.50		
					Total	1062.40	1994.92	2119403.01
					Cum			
	Basic rate	1882.00						
	Area Wiegthage @ 6%	112.92						
	Total Rate in Rs	1994.92						
5	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (KPWD SR 2018-19, Page No.155, Item No.20.18)							
	12th main road from KG Halli road	1	170.00	7.50	0.23	286.88		
	14th main road from KG Halli road	1	188.00	5.50	0.23	232.65		
	15th main road from KG Halli road	1	87.00	5.50	0.23	107.66		
	16th main road from KG Halli road	1	40.00	5.50	0.23	49.50		
	cross road from KG Halli road	1	86.00	5.50	0.23	106.43		
	2nd cross road from KG Halli road	1	32.00	5.50	0.23	39.60		
	3rd cross road from KG Halli road	1	43.00	5.50	0.23	53.21		
	4th cross road from KG Halli road	1	43.00	5.50	0.23	53.21		
	5th cross road from KG Halli road	1	43.00	5.50	0.23	53.21		
					Total	929.14	2001.28	1859464.30
					Cum			
	Basic rate	1888.00						
	Area Wiegth age @ 6%	113.28						
	Total Rate in Rs	2001.28						
6	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. Clause 502 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.6)(Issued Rate 01/07/2020)							
	12th main road from KG Halli road	1	170.00	7.50		1275.00		
	14th main road from KG Halli road	1	188.00	5.50		1034.00		
	15th main road from KG Halli road	1	87.00	5.50		478.50		
	16th main road from KG Halli road	1	40.00	5.50		220.00		
	cross road from KG Halli road	1	86.00	5.50		473.00		
	2nd cross road from KG Halli road	1	32.00	5.50		176.00		
	3rd cross road from KG Halli road	1	43.00	5.50		236.50		
	4th cross road from KG Halli road	1	43.00	5.50		236.50		
	5th cross road from KG Halli road	1	43.00	5.50		236.50		
					Total	4129.50	29.68	122563.56
					Sqm			
	Basic rate	28.00						
	Area Wiegth age @ 6%	1.68						
	Total Rate in Rs	29.68						
7	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications. Clause 503 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.7)(Issued Rate 01/07/2020)							

No.	Particulars	No	L	B	D	Quantity	Rate	Amount
7	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications. Clause 503 of MORTH V revision (KPWD SR 2018-19, Page No.158, Item No.21.7)(Issued Rate 01/07/2020)							
	12th main road from KG Halli road	1	170.00	7.50		1275.00		
	14th main road from KG Halli road	1	188.00	5.50		1034.00		
	15th main road from KG Halli road	1	87.00	5.50		478.50		
	16th main road from KG Halli road	1	40.00	5.50		220.00		
	cross road from KG Halli road	1	86.00	5.50		473.00		
	2nd cross road from KG Halli road	1	32.00	5.50		176.00		
	3rd cross road from KG Halli road	1	43.00	5.50		236.50		
	4th cross road from KG Halli road	1	43.00	5.50		236.50		
	5th cross road from KG Halli road	1	43.00	5.50		236.50		
					Total	4129.50	12.72	52527.24
	Basic rate	12.00				Sqm		
	Area Wiegth age @ 6%	0.72						
	Total Rate in Rs	12.72						
8	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II Cum (50 mm to 75 mm) with 4.5 % VG-30 Bitumen .(KPWD SR 2018-19, Page No.160, Item No.21.17.6)(Issued Rate 01/07/2020)							
	12th main road from KG Halli road	1	170.00	7.50	0.05	63.75		
	14th main road from KG Halli road	1	188.00	5.50	0.05	51.70		
	15th main road from KG Halli road	1	87.00	5.50	0.05	23.93		
	16th main road from KG Halli road	1	40.00	5.50	0.05	11.00		
	cross road from KG Halli road	1	86.00	5.50	0.05	23.65		
	2nd cross road from KG Halli road	1	32.00	5.50	0.05	8.80		
	3rd cross road from KG Halli road	1	43.00	5.50	0.05	11.83		
	4th cross road from KG Halli road	1	43.00	5.50	0.05	11.83		
	5th cross road from KG Halli road	1	43.00	5.50	0.05	11.83		
					Total	218.30	6407.70	1398800.91
	Basic rate	6045.00				Cum		
	Area Wiegth age @ 6%	362.70						
	Total Rate in Rs	6407.70						
9	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (KPWD SR 2018-19, Page No.162, Item No.21.78.12)(Issued Rate 01/07/2020)							
	12th main road from KG Halli road	1	170.00	7.50	0.03	38.25		
	14th main road from KG Halli road	1	188.00	5.50	0.03	31.02		
	15th main road from KG Halli road	1	87.00	5.50	0.03	14.36		
	16th main road from KG Halli road	1	40.00	5.50	0.03	6.60		
	cross road from KG Halli road	1	86.00	5.50	0.03	14.19		
	2nd cross road from KG Halli road	1	32.00	5.50	0.03	5.28		
	3rd cross road from KG Halli road	1	43.00	5.50	0.03	7.10		
	4th cross road from KG Halli road	1	43.00	5.50	0.03	7.10		
	5th cross road from KG Halli road	1	43.00	5.50	0.03	7.10		
					Total	130.98	7537.66	987282.7
	Basic rate	7111.00				Cum		
	Area Wiegth age @ 6%	426.66						
	Total Rate in Rs	7537.66						

Sl.	Particulars	No	L	B	D	Quantity	Rate	Amount
10	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/Concrete Surface: Providing and laying of hot applied thermoplasticcompound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (KPWD SR 2018-19, Page No.146, Item No.19.52)							
	12th main road from KG Halli road	2.50	170.00	0.15		63.75		
	14th main road from KG Halli road	2.50	188.00	0.15		70.50		
	15th main road from KG Halli road	2.50	87.00	0.15		32.63		
	16th main road from KG Halli road	2.50	40.00	0.15		15.00		
	cross road from KG Halli road	2.50	86.00	0.15		32.25		
	2nd cross road from KG Halli road	2.50	32.00	0.15		12.00		
	3rd cross road from KG Halli road	2.50	43.00	0.15		16.13		
	4th cross road from KG Halli road	2.50	43.00	0.15		16.13		
	5th cross road from KG Halli road	2.50	43.00	0.15		16.13		
					Total	274.50	454.74	124826.13
	Basic rate	429.00				Sqm		
	Area Wieght age @ 6%	25.74						
	Total Rate in Rs	454.74						
11	CONCRETE PAVEMENT KSRRB M600- Cement Concrete Pavements KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1 ,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a hatching plant, transported to site,laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5 -do- with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with fixed form paver. (PW,P& IWTDR SR 2018-19 P- 174, I-22.1.2)							
	Cross road 1	1.00	60.00	3.50	0.15	31.50		
	Cross road 2	1.00	60.00	3.50	0.15	31.50		
	Cross road 3	1.00	60.00	3.50	0.15	31.50		
	Cross road 4	1.00	110.00	3.50	0.15	57.75		
					Total	152.25	3859.70	587639.9036
	Basic Rate	3585.00						
	Deduct Cement Rate as per SR 2018-19	735.95				(150/100)*490.63		735.95
	Sub Total	2849.05						
	Add Cement Rate as per issue rate	792.18				(150/50)*264.06		792.18
	Total	3641.23						
	Basic Rate	3641.23						
	Area Weightage@6%	218.47						
	Total Rate	3859.70						

No.	Particulars	No	L	B	D	Quantity	Rate	Amount
12	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum, Coarse and fine aggregate conforming to IS 383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rammers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermeable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour, hire charges of machineries, all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum and coarse aggregate 0.69 cum, fine aggregate 0.46 cum. (PW, P& I WTD SR 2018-19, Pg No 176 Item No. 22.6.1)							
	Cross road 1	1.00	6000	3.00	0.15	26.97	31.50	
	Cross road 2	1.00	40.00	3.00	0.15	20.30	31.50	
	Cross road 3	1.00	6000	3.00	0.15	30.45	31.50	
	Cross road 4	1.00	110.00	3.00	0.15	52.80	57.75	815139.49
						Total	130.52	5353.95
								698771.3063
	Basic Rate	4916.00					152.25	
	Deduct Cement Rate as per SR 2018-19	1766.30				(360/100)*490.63		1766.3
	Sub Total	3149.70						
	Add Cement Rate as per issue rate	1901.20				(360/50)*264.06		1901.2
	Total	5050.90						
	Basic Rate	5050.90						
	Area Weightage @ 6%	303.05						
	Total Rate	5353.95						
								8811944.84
								Total 8841446.34
13								1057433.38
14								Add 12% GST Charges 1060973.56
15								88119.45
16								Add 1% for DPR & PMC Charges 88414.46
17								Miscellaneous and other charges 9165.63
								Grand Total 10000000.00

Certificate:-

1. That the workspot inspected by me and found work is necessary.
2. That the area comes within the Bruhat Bangalore Mahanagara Palike Limits.
3. That the rates are adopted based on the PWD SR of 2018-19 (Issue Rate 01/07/2020)
4. That the provisions made in the estimate are necessary and quite essential.

Assistant Engineer
Ward No. 12
BBMP

Asst. Executive Engineer
Shettyhalli Sub-Division
BBMP

Executive Engineer
Dasarahalli Division
BBMP

ADMINISTRATIVELY SANCTIONED FOR 100.00 Lakhs

(Rupees 100,00,000/- only)

(One hundred Lakhs only)

Under the Head of Account P-2178

Work sanctioned by Dy. Mayor

Registered as no EE(D.D.)/AS. 12/21-22 Subject to conditions contained in Enclosed Memo

No. 12/2021-22 Dt. 25.06.21

JE/AE. (DASARAHALLI)

Technically Sanctioned for Rs. 88.41 Lakhs

Rs. In words Eighty Eight Lakhs Four

One hundred Four Thousand Eight Hundred Sixty

Under P-2178

Job Code No. 012-20-000037

Registered as CE No. 10/24-22 Subject to conditions contained in Enclosed Memo

No. CE/12/TS/10/2021-22 Dt. 05/07/2021

AE/JE. TA CE(D)